

ANNUAL REPORT

FOR 1897,

OF THE MEDICAL OFFICER OF HEALTH

FOR THE

THORNTON URBAN SANITARY AUTHORITY.

To the Chairman and Members of the Thornton Urban District Council.

Gentlemen,

I have the pleasure of presenting to you my Annual Report for the year 1897. A year which will remain memorable in history as the Diamond Jubilee of the accession of our Gracious Queen Victoria to the throne of this kingdom. I would have been pleased if I could have stated that, by the philanthropy of some of the wealthy gentlemen who are interested in the township of Thornton, the year had been marked in this district by the gift of some memorial which would have been of benefit to the inhabitants, both of this and future generations. Such, for instance, as a Recreation Ground, Public Baths, or a Town Hall for the accommodation of the Council, which would have been worthy of the members. If, however, I have not that pleasure, I may yet congratulate the Council for having taken forward steps for the better sanitation of the district. These steps I will be able to refer to later on.

I may also be allowed to refer to other steps which have recently been taken, and which may be of great importance to the future of Thornton. I allude to the extension of the Bradford Tramway system from Four Lane Ends to Thornton. This is an undertaking, which if carried out, would be of incalculable benefit to the district. And I would like to draw the attention of building speculators and others to the advantages which Thornton possesses. I do not know of any place around Bradford which has more desirable sites for building villa and other residences, than there are all the way down the Thornton road from the East end of the village to the City boundary, a distance of a mile and a half. The country there is on a gentle slope, affording the best possible means of drainage, and it lies open to the South, thus ensuring plenty of sunshine,

which is so essential to good health. The luxuriance of foliage and the verdure of the fields about School Green testify to the fertility of the land, and the absence of the Bradford smoke, which never reaches so far, besides the generally prevailing winds being West-erly, carry the smoke in an opposite direction. Then also the health of the township has been very good for many years; for if we ex-clude the Mountain district, which is quite a separate place, being about a mile and a half up the opposite hill, there has not been any epidemic of serious disease for a great number of years; and the average death rate for the whole of the district for the past ten years has been rather under 17 per thousand inhabitants, which will com-pare favourably with other townships in the neighbourhood.

Population.—The population of the Thornton District I estimate to be 5680, that is the same as the census in 1891. From the census taken in 1881 to that in 1891, the population decreased 400, so that according to the ordinary way of reckoning it would have decreased by some 200 more. But that I feel sure is not correct. I have referred to the rate book, and I see that the rateable value has increased by about £100, and there is not more than an average number of houses uninhabited at the present time, and when we consider these facts, along with the increase of births over deaths, I am sure we are justified in concluding that the population is not less now than it was in 1891.

Births.—The total number of Births registered during the year was 166, of which 88 were males, and 78 females; giving a birth rate equal to 29·2 per thousand inhabitants. In the previous year it was equal to 27·9.

Deaths.—The total number of Deaths registered was 105; 47 being males, and 58 females; giving a death rate equal to 18·4 per thousand inhabitants. In the previous year it was equal to 15·3. This shows a considerable increase, but the year 1896 was excep-tionally low. For the whole of England & Wales the rate for 1897 was 17·4. In the thirty-three great towns being equal to 19·1. In sixty-seven other large towns, 17·2; while for England & Wales, less these one hundred large towns, it was only 16·4.

The distribution according to age of these 105 deaths was as follows:

Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards
28	13	1	3	33	27

In the previous year the numbers were respectively:

20	4	4	4	32	23
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This shows the increase to have been chiefly among children, there having been 8 more deaths of infants under one year of age as compared with 1896; and of children between one and five years of age there was an increase of 9.

The causes of death are shown in the following table :

Class I. Zymotic Diseases.

Measles	...	...	...	2
Whooping Cough	...	...	...	1
Diarrhœa	...	...	...	2
Puerperal Fever	...	...	...	1

Class II. Constitutional Diseases.

Cancer	...	...	...	4
Phthisis	...	...	...	7
Other forms of Tubercular Disease				3
Pernicious Anæmia	...	...		1
Congenital Syphilis	...	...		1

Class III. Local Diseases.

<i>a</i> Nervous System, including Apoplexy, Convulsions, Meningitis, &c.	18
<i>b</i> Vascular System, Heart Diseases	9
<i>c</i> Respiratory System, including Bron- chitis, Pneumonia and Pleurisy	19
<i>d</i> Digestive System, including Gastritis, Diseases of Liver, Enteritis, &c.	6
<i>e</i> Reproductive System, Child birth	1

Class IV. Developmental System.

Defective Development, Premature Births, &c.	...	...	...	10
Old Age	...	...	...	11
Teething	...	...	...	2

Accidental Deaths 6

Ill-defined (Natural causes, Inquest) 1

Total 105

The various rates of mortality were as follows :

Infantile Mortality.—28 children died before attaining the age of one year, which gives an infantile mortality of 168 per thousand births registered. In the previous year it was only 125. This, as I have before stated, is one of the causes of the increased death

some rate, and in looking for the cause I find a large number of premature births, several of them being cases of twin births. 12 died within a few days of birth, ~~others~~ only surviving a few minutes. For the whole of England & Wales this mortality was 156 for the year 1897, ranging from 177 in the largest towns to 138 in the small towns and country districts.

Zymotic Death Rate.—Six deaths were registered from the Zymotic diseases, including Puerperal Fever as one. This gives a death rate equal to 1.05 per thousand of population. In the previous year it was equal to 0.1 ; and for England & Wales in 1897, 2.15.

Phthisis Death Rate.—There were seven deaths from Phthisis, giving a rate equal to 1.2 per thousand of population. In the previous year it was equal to 1.5.

Respiratory Death Rate.—There were 19 deaths from other diseases of the respiratory organs, including Bronchitis, Pneumonia, and Pleurisy, giving a rate equal to 3.3 per thousand of population. In 1896 it was 2.6.

Infectious Diseases.—There were 14 cases of Infectious Disease notified during the year. In the previous year there were only 9. This shows a slight increase, but if we look at the returns since the Notification Act was adopted in 1891, there is seen to be a very satisfactory decline in recent years. The figures are respectively 30, 28, 64, 39, 28, 9, and 14.

The 14 cases were as follows :

Typhoid Fever	..	...	...	1
Scarlet Fever	...	...	...	9
Erysipelas	...	...	...	3
Puerperal Fever	...	...	...	1

Of the 9 cases of Scarlet Fever, 5 were from Mountain, and 4 from West Scholes. Not a single case occurring in the village of Thornton. The disease had spread by children attending school at Queensbury, where an epidemic then existed. Eight of these cases were at once admitted into the Isolation Hospital, and the houses and clothing disinfected, which I believe prevented the epidemic from spreading.

It is satisfactory to note that there was only one case of Typhoid Fever. This, a very mild one, was isolated in the Hospital.

Measles.—Measles, which had existed in a very severe form in the surrounding villages during 1896, and about 20 cases of which

I had recorded during the last 3 months of that year in the Thornton district, assumed epidemic form in the village during the month of April. The first case observed was on the 26th April, and the epidemic continued until the middle of August, although after the first week in June there were only scattered cases in the outside districts. The epidemic was at its height in May, when there must have been more than 100 cases.

Three of the day schools were closed by order of the managers without my intervention. The James Street Board School being closed, the Infant department from the 4th of May, and the whole school from the 14th of the same month until the 14th of June. The National School, which became affected later, was closed on the 21st of May until the 14th of June. The Keelham Board School, which was the last to suffer, was closed on the 28th of May, and was not reopened until after the summer holidays in August. As before mentioned only 2 deaths resulted from this disease.

There were many cases of Diarrhoea during August and September, and again a few severe cases in November and December. Two deaths resulted from this cause, both being young children.

In November and December there was a large number of cases of Mumps.

In December many cases of Chicken Pox occurred.

Influenza has been present with us during the last four months of the year. There were a few very decided cases in September, and again they became more marked in December.

There were some cases of Whooping Cough in the Mountain district, one of which proved fatal.

SANITARY WORK.

On referring to Table C, you will find that much sanitary work has been done during the year. Among which I may mention 93 nuisances abated, 13 sinks disconnected, and 7 trapped. The construction of 18 new closets, 6 of which were water closets; the laying of 170 yards of 9-inch, and 50 yards of 6-inch pipe drains at Back Heights; the construction of a Tank to hold 14000 gallons of water for domestic purposes at Hill Top. And also the taking of two samples of milk, under the "Sale of Food and

Drugs Act." In connection with this latter, let me point out that the County Council will bear the cost of analysis, and of any legal proceedings taken under this Act, if their conditions are followed out.

Scavenging.—In my Annual Report for 1895, while congratulating your Council upon having undertaken the scavenging of the district, I expressed regret that you had not decided to do the work with your own Sanitary Staff, instead of letting it to contractors. But during the first year, when one contractor had nearly all the district to look after, I must confess that it was well done. In the second year however, when it was divided up between many, I regret to say that it has not been done satisfactorily. The complaints of neglect of contractors have been numerous. I think the time has now arrived for you to re-consider whether it will not pay better to do the work with your own staff. One important advantage in doing so will be that you can have brought to your notice all ashpits which are not in a good sanitary condition; and there are yet a large number in the district which require re-constructing. And in this connection, I would especially urge you to require those in the Hill Top district to be put into proper sanitary repair, as it is from underneath these that we draw our water supply.

The chief step of importance taken during the year, has been your determination to undertake the main drainage of a great part of the centre of the village. Mr. Drake, the engineer, has submitted plans to you for good pipe sewers, down West Lane and Sapgate Lane, and along Market Street, to join the sewer at Green Lane Top, from whence it goes direct to the sewage works. This, which I hope you will carry out soon, will afford means of drainage for the most thickly populated part of Thornton, and will give a large number of householders the opportunity of deriving benefit from the sewage works which they have not enjoyed before. And I feel sure that it will do much to raise the standard of health in this central part.

There will then remain the wants of the New Road, and the many and well populated streets running off it to be attended to. And I beg to press upon you the importance of doing this at the same time under one scheme. The extra expense certainly would not outweigh the advantages. And the importance of it is no less pressing than the Market Street part. If a good sewer was made from Wensley Bank to Green Lane top, in addition to the Market Street sewer, then the district could claim to have the main arteries of good drainage.

Plans were also submitted for the sewerage and sewage treatment at Mountain. This scheme would involve heavy outlay, and

in my opinion, more than the circumstances demand. I certainly think that we should get the centre of the village connected with the sewage works before draining the outside districts. And also I cannot agree with separate sewage works at Mountain, which could only benefit some fifty cottages, where there are no water-closets. If your Council become obliged at any future time to drain this part, I think it should be brought down to the lower part of the district, and so benefit intervening districts on its way. It seems to me there are three or four different routes it might take to achieve this object. But as I consider this premature I will not go into it now.

WATER SUPPLY.

Most of your district is well provided with a constant supply of good wholesome water, 785 houses, as shown in Table C, being thus supplied.

But there is the Mountain district which is not so provided for. Owing to the great height at which this district is situated, I believe about 1100 feet above sea level, even the Bradford Corporation mains which pass just below are not able to supply the houses. So that the inhabitants have to rely upon wells, which I am afraid must be called shallow wells for their water for domestic purposes. When it is considered that nearly all the ground in this district has been quarried, it is easy to understand the ready means for percolation of sewage and other impurities into these wells. A few months ago, your council had samples of water from six of these wells analysed, and four of them were declared to be polluted, or as not above suspicion. For many years Typhoid Fever seemed to be endemic at Mountain, and I feel convinced that it was propagated by the polluted water. Fortunately, there has not been a single case during the past twelve months, and only two cases in the year before, both of which were isolated in the Hospital, and so lessened the risks of the disease spreading. But while the inhabitants have to drink the water from these shallow wells, they will always run the risk of contracting the disease whenever a case is imported into the district. Besides, recent experiments have proved that the germs of Typhoid Fever may retain vitality when buried in the ground for a considerable period, and although probably not increasing there, may commence to do so when introduced into a suitable medium, such as the water in summer time would be.

Now, I think your Council should endeavour to give these people pure water to drink, and this, I am sure, can be best and most economically done by friendly agreement with the Queensbury District Council, who will have to do the same for that part of their district which adjoins your own, and is in the same predicament.

I assert, fearlessly, that if you will supply Mountain with pure water; and if you will insist upon the privies and ashpits being put into good sanitary repair; that is having the walls made impervious, the bottoms concreting, the tops covered in, and suitable ventilation provided, and then also see that the scavenging is regularly and properly carried out,—then, I say you will have done what will make Mountain a healthy district, and I believe we shall hear no more of these Typhoid epidemics, which have supplied the greater number of cases to the Hospital since it was opened, and so kept up the expenses of that department.

After repeated advice, I am pleased to say that the Joint Hospital Board have at last appointed a Medical Officer to attend cases admitted to the Hospital, and not having a medical gentleman of their own to attend them; so making the Hospital now complete for the reception of infectious cases.

In my last Annual Report I drew your attention to the bad condition of several streets, mentioning Henry Street, Mary Street, George Street, James Street and Firth Street. Nothing has been done to these yet. If the Streets were well paved, they would be kept cleaner, the water would get off quickly, and so the streets and houses and the atmosphere in them would be drier and more healthy. It is only necessary to compare High Street, or Albert Street, with Henry Street, to see how far the latter is behind the others in wholesomeness.

In conclusion allow me to point out what I consider to be the most pressing needs of the district. First in importance is the making of main sewers for the central part of the district. Secondly the provision of a supply of good water for Mountain district. And along with these, the reconstruction, upon sanitary lines, of all the Ashpits and Privies which are not in a good state of sanitation.

I append Tables A, B, and C duly filled up.

I am, gentlemen,

Your obedient servant,

A. E. TUNSTALL,

L.R.C.P., and L.R.C.S., Ed.,

Medical Officer of Health.

Rose Cottage, Thornton,

February 16th, 1898.

ROSE COTTAGE,
THORNTON,
NEAR BRADFORD.

March 1st 1898.

Dear Sir,

I have pleasure in

sending you a copy of my Annual
Report for 1897 to the Thornton
Urban District Council.

I am,

Yours truly,

A. E. Tunstall.

Medical Officer of Health.

